

IN THE CLAIMS

Claims 1-32 - Cancelled.

33. (Currently Amended) Apparatus for generating electrical energy from a flowing medium of wind or water comprising:

- a stationary supporting structure,
- a rotary structure supported for unidirectional rotation on said fixed structure,
- a rotary shaft supporting said rotary structure and rotatably supported by said fixed structure,
- said rotary structure comprising a plurality of panels each having an open frame[[,]] and a plurality of panels vanes supported by said frame, said vanes comprising thin rigid plate members, each of said vanes having a opposite side edges and being rotatably supported at one of said side edge edges being rotatably supported by said open frame for pivotable movement between an open position perpendicular to said frame and a closed position in a plane of the frame, said panels vanes being supported from said frame solely by their at said one of said side edges thereof so that top and bottom edges thereof of the vanes are free and unrestrained such that when the panels vanes are in closed position and exposed to the flowing medium, the panels vanes will exert a rotational force on the frame to produce rotation of the rotary structure,
- a system for pivotably moving said panels vanes in synchronism between said open and closed positions including an aligner cable connecting

said ~~panels~~ vanes at side edges thereof opposite said side edges at which said vanes are
rotatably supported by said frame to synchronize rotation of the vanes as the vanes move
between closed and open positions ~~to rotate the panels to closed position when facing the~~
~~flowing medium and to open position after the frame has undergone a rotation of 180°,~~

~~said system for pivotably moving said panels~~
~~comprising oscillatory stops on~~ between said frame ~~which~~ and said vanes to block rotatable
movement of said ~~panels~~ vanes in the closed position and permit rotatably rotatable
movement of the ~~panels~~ vanes to said open position, ~~and a panel aligning wire for~~ said aligner
cable synchronizing position movement of said ~~panels~~ vanes and limiting the angular
movement to said open position,

~~said rotary shaft extending outwardly from said~~
~~frame, and supporting said frame so that its lower edge is free and the frame can undergo free~~
~~travel without restriction, and~~

~~means coaxial with said rotary shaft for~~
~~generating electrical energy from rotation of the frame and the rotary shaft.~~

34. (Previously Added) Apparatus as claimed in claim 33, wherein when the
flowing medium is wind, the rotary shaft is vertical.

35. (Previously Added) Apparatus as claimed in claim 33, wherein when the
flowing medium is water the rotary shaft is horizontal.

36. (Currently Amended) Apparatus as claimed in claim 33, wherein said ~~panels~~ vanes first provide resistance against the flowing medium in said closed position and generate circular movement of the rotary structure and then allow the flowing medium to pass freely and by action of the ~~oscillation regulation~~ oscillatory stops, produce unidirectional rotary movement, independent of the flow direction of the medium.

37. (Currently Amended) Apparatus as claimed in claim 33, comprising pins restricting said stops to limit rotation of said ~~panels~~ vanes to 90° and means for releasing said pins when the flowing medium develops a force exceeding a predetermined maximum value thereby releasing the ~~panels~~ vanes for free rotatable movement.

38. (Currently Amended) Apparatus as claimed in claim 33, comprising an ~~aligning wire~~ aligner cable support comprising a thin ~~metal bar~~ member on each ~~panel~~ vane supporting ~~several of said aligning wires~~ aligner cable.

39. (Currently Amended) Apparatus as claimed in claim 38, wherein said ~~wires pass~~ aligner cable passes through the cable supports on said vanes, said cable and said supports being [[, and are]] adjustable to adjust distances between the ~~panel~~ vanes to correspond to the distance between pivot ~~oscillation axes~~ of the vanes such that the ~~panels~~ vanes rotate synchronously in closing and opening movements.

40. (Currently Amended) Apparatus as claimed in claim 39, comprising

~~means controlling a steel wire connected to the bottom of the oscillation stops[[, and]]~~
~~responsive to a high wind speed sensor, which activates a motor at a bottom side of the panel~~
~~frame to act on the wire to control the oscillation stops so that the panels vanes can rotate in~~
the direction of wind flow, while the frame is braked.

Add the following new claims:

41. (New) Apparatus as claimed in claim 33, wherein each vane is rotatably supported by said frame at said one of the side edges by spindles rotatably connecting the vane to the frame at the top and bottom edges of the vane, the remainder of said one side edge of the vane between the spindles being disconnected from said frame.

42. (New) Apparatus as claimed in claim 41, wherein said spindles extend outwardly of each vane at the top and bottom edges thereof and engage the frame thereat.

43. (New) Apparatus as claimed in claim 41, wherein each said vane is bent at said one side edge thereof, said spindles being secured to said vane at a vertex where said vane is bent.

44. (New) Apparatus as claimed in claim 41, comprising shock absorbers on said vanes for absorbing shock upon impact of said vanes with one another in the closed positions.

45. (New) Apparatus as claimed in claim 33, wherein said aligner cable includes a plurality of washers fixed thereto in spaced relation along the cable, each said vane including a projecting member loosely fitted in a respective said washer and secured therewith.

46. (New) Apparatus as claimed in claim 33, wherein each said vane includes a projecting member in the shape of a washer which slidably receives the aligner cable.

47. (New) Apparatus as claimed in claim 46, comprising spaced stops on said aligner cable on opposite sides of said projecting member.

48. (New) Apparatus as claimed in claim 33, wherein said oscillatory stops are secured to said frame to engage said vanes in the closed position thereof and produce rotation of the frame.

49. (New) Apparatus as claimed in claim 48, wherein said oscillatory stops are disposed at upper and lower edges of the frame.

50. (New) Apparatus as claimed in claim 33, further comprising an additional impulse drive to rotate the rotatable structure.

51. (New) Apparatus as claimed in claim 50, wherein said additional impulse drive comprises a motor in driving connection with said panels.